

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1. (currently amended). An isolated biopolymer marker ~~peptide~~ consisting of SEQ ID NO:1 ~~diagnostic for Alzheimer's disease which evidences a link to Alzheimer's disease.~~

Claims 2-38. (cancelled)

Claim 39. (withdrawn - currently amended) A method for ~~diagnosing Alzheimer's disease~~ determining the presence of a biopolymer marker consisting of SEQ ID NO:1 comprising:

~~(a) obtaining a sample from a patient;~~

[[ (b) ] ] (a) conducting mass spectrometric analysis on a  
[[said]] sample obtained from a patient in a manner effective to maximize ~~elucidation of discernible~~ analysis of peptide fragments contained therein and comparing mass spectral profiles of said biopolymer marker consisting of SEQ ID NO:1 to mass spectral profiles of peptides obtained and analyzed from said sample; and

~~(c) comparing mass spectrum profiles of a peptide consisting of SEQ ID NO:1 to mass spectrum profiles of peptides elucidated from said sample; wherein recognition of a mass spectrum profile in~~

~~the sample displaying the characteristic profile of the mass spectrum profile for the peptide consisting of SEQ ID NO:1 is diagnostic for Alzheimer's disease~~

(b) confirming the presence of said biopolymer marker consisting of SEQ ID NO:1 in said sample by identifying a mass spectral profile having an ion peak at about 1594 daltons; wherein the presence of said biopolymer marker consisting of SEQ ID NO:1 is indicative of a link to Alzheimer's disease.

Claim 40. (withdrawn). The method of claim 39, wherein said sample is an unfractionated body fluid or a tissue sample.

Claim 41. (withdrawn). The method of claim 39, wherein said sample is selected from the group consisting of blood, blood products, urine, saliva, cerebrospinal fluid, and lymph.

Claim 42. (withdrawn). The method of claim 39, wherein said mass spectrometric analysis is selected from the group consisting of Surface Enhanced Laser Desorption Ionization (SELDI) mass spectrometry (MS), Maldi Qq TOF, MS/MS, TOF-TOF, ESI-Q-TOF and ION-TRAP.

Claim 43. (withdrawn). The method of claim 39, wherein said patient is a human.

Claim 44. (currently amended). ~~An Alzheimer's disease diagnostic kit~~ A kit for determining the presence of a biopolymer marker consisting of SEQ ID NO:1 comprising: (a) a peptide consisting of SEQ ID NO:1, and (b) an antibody that binds to said peptide in a sample obtained from a patient.

Claim 45. (withdrawn - currently amended) The ~~diagnostic~~ kit of claim 44, wherein said antibody is immobilized on a solid support.

Claim 46. (withdrawn - currently amended) The ~~diagnostic~~ kit of claim 44, wherein said antibody is labeled.